Atty. Ref. No. 031048

This Listing of Claims will replace all prior versions, and listings, of claims in this application:

Listing of Claims:

- 1-13. (Cancelled).
- 14. (Withdrawn) An isolated pyruvate carboxylase polypeptide having an amino acid sequence at least 95% identical to a sequence selected from the group consisting of:
- (a) the amino acid sequence of the pyruvate carboxylase polypeptide having the complete amino acid sequence in SEQ ID NO: 2; and
- (b) the amino acid sequence of the pyruvate carboxylase polypeptide having the complete amino acid sequence encoded by the clone contained in ATCC Deposit No. PTA-982.
- 15. (Amended) A method of making lysine amino acids by fermentation, comprising culturing a strain of Corynebacterium glutamicum in a culture medium, said strain including expressing a an isolated-nucleic acid molecule encoding pyruvate carboxylase, said nucleic acid molecule comprising a polynucleotide having a nucleotide sequence at least 95% identical to a sequence selected from the group consisting of:
- (a) a nucleotide sequence encoding the pyruvate carboxylase polypeptide having the amino acid sequence in SEQ ID NO: 2;
- (b) a nucleotide sequence encoding the pyruvate carboxylase polypeptide having the complete amino acid sequence encoded by the clone contained in ATCC Deposit No. PTA-982; and

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(c) a nucleotide sequence complementary to any of the nucleotide sequences in (a) or (b),

wherein said pyruvate carboxylase is expressed 2 to 20 fold higher in said strain than in wild-type Corvnebacterium glutamicum;

producing lysine, and recovering said lysine amino acids.

16-17. (Canceled).

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CONCLUSION

Applicants submit that the resubmission is not done for any reason related to patentability and respectfully request that the amendments be entered for the reasons given in the July 2, 2004, response. Prompt and favorable consideration of the associated Amendment and Reply is respectfully requested.

Respectfully submitted,

Dated:August 3, 2004

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